AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Claims 9-13 have been amended herein.

LISTING OF CLAIMS

1. (Original) A computer-implemented method operable on a process, the method comprising:

analyzing the process against a formula using a predetermined modal logic based on ambient calculus to determine whether the process satisfies the formula; and,

outputting whether the process satisfies the formula.

2. (Original) The method of claim 1, wherein analyzing the process comprises analyzing the process in a recursive manner.

3. (Original) The method of claim 1, wherein analyzing the process comprises normalizing the process to determine whether the process comprises only a single element.

4. (Original) The method of claim 1, wherein analyzing the process comprises partitioning the process to determine whether each component of the process satisfies the formula.

5. (Original) The method of claim 1, wherein analyzing the process comprises determining a plurality of names of the process, and verifying that a name exists for the formula that is unequal to any of the plurality of names.

6. (Original) The method of claim 1, wherein analyzing the process comprises analyzing each sublocation of the process against the formula.

7. (Original) The method of claim 1, wherein analyzing the process comprises analyzing a spatial reach of the process against the formula.

8. (Original) A computer implemented method comprising:

recursively analyzing a process against a formula using a predetermined modal logic based on ambient calculus comprising:

normalizing the process to determine whether the process comprises only a single element;

partitioning the process to determine whether each component of the process satisfies the formula;

determining a plurality of names of the process, and verifying that a name exists for the formula that is unequal to any of the plurality of names;

analyzing each sublocation of the process against the formula;

analyzing a spatial reach of the process against the formula; and,

outputting whether the process satisfies the formula.

9. (Currently amended) A machine-readable medium having instructions stored thereon for execution by a first process to perform a method comprising:

inputting a second process;

recursively analyzing the second process against a formula using a predetermined modal logic based on ambient calculus to determine whether the second process satisfies the formula; and,

outputting whether the second process satisfies the formula.

10. (Currently amended) The medium of claim 9, wherein recursively analyzing the second process comprises normalizing the second process to determine whether the second process comprises only a single element.

11. (Currently amended) The medium of claim 9, wherein recursively analyzing the second process comprises:

partitioning the second process to determine whether each component of the second process satisfies the formula; and,

determining a plurality of names of the second process, and verifying that a name exists for the formula that is unequal to any of the plurality of names.

12. (Currently amended) The medium of claim 9, wherein recursively analyzing the second process comprises:

analyzing each sublocation of the second process against the formula; and,

analyzing a spatial reach of the second process against the formula.

13. (Currently amended) A machine-readable medium having instructions stored thereon for execution by a first process to perform a method comprising:

recursively analyzing a second process against a formula using a predetermined modal logic based on ambient calculus comprising:

normalizing the second process to determine whether the second process comprises only a single element;

partitioning the second process to determine whether each component of the second process satisfies the formula;

determining a plurality of names of the second process, and verifying that a name exists for the formula that is unequal to any of the plurality of names;

analyzing each sublocation of the second process against the formula;

analyzing a spatial reach of the second process against the formula; and,

outputting whether the second process satisfies the formula.

14. (Original) A computerized system comprising:

a processor;

a computer-readable medium;

first data stored on the medium and representing a process;

second data stored on the medium and representing a formula using a predetermined modal logic based on ambient calculus; and,

an analysis program executed by the processor from the medium to analyze the process against the formula in a recursive manner.

15. (Original) The system of claim 14, wherein the analysis program is to normalize the process to determine whether the process comprises only a single element.

16. (Original) The system of claim 14, wherein the analysis program is to partition the process to determine whether each component of the process satisfies the formula.

17. (Original) The system of claim 14, wherein the analysis program is to determine a plurality of names of the process, and verify that a name exists for the formula that is unequal to any of the plurality of names.

18. (Original) The system of claim 14, wherein the analysis program is to analyze each sublocation of the process against the formula.

19. (Original) The system of claim 14, wherein the analysis program is to analyze a spatial reach of the process against the formula.